

10/539,534

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

ATTORNEY'S SOCKET NUMBER

082368-004800US

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)  
10/539,534

INTERNATIONAL APPLICATION NO.  
PCT/JP03/16549

INTERNATIONAL FILING DATE  
December 24, 2003

PRIORITY DATE CLAIMED  
December 24, 2002

TITLE OF INVENTION **HIGHLY EFFICIENT GENE TARGETING VECTORS AND METHODS FOR GENE  
TARGETING IN EPITHELIAL CELL LINES**

APPLICANT(S) FOR DO/EO/US **Kazuaki UMEDA; Takeshi MATSUI; and Mayumi NAKAYAMA**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☐ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A preliminary amendment.
14. ☐ An Information Disclosure Statement under 37 CFR 1.76.
15. ☐ A substitute specification.
16. ☒ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825.
18. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

Adjustment Data, Application Data Sheet, under 37 CFR 1.76.

02/17/2006 HTRAM 00000001 EV143V 10520000

01 FC:1617

02 FC:1819

03 FC:1616

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/539,534</b>	INTERNATIONAL APPLICATION NO. <b>PCT/JP03/16549</b>	ATTORNEY'S DOCKET NUMBER <b>082368-004800US</b>
20. Other items or information: Express Mail Label No.: <b>EV 566969828 US</b> ; copies of cited references AA, AB, AD, AE and AG; Copy of International Search Report; and English translation of the International Preliminary Report on Patentability.		
The following fees have been submitted		<b>CALCULATIONS</b> <b>PTO USE ONLY</b>
21. <input type="checkbox"/> Basic national fee (37 CFR 1.492(a)) ..... <b>\$300</b>		\$
22. <input type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... <b>\$0</b> All other situations ..... <b>\$200</b>		\$
23. <input type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... <b>\$0</b> Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority ..... <b>\$100</b> International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB ..... <b>\$400</b> All other situations ..... <b>\$500</b>		\$
<b>TOTAL OF 21, 22 and 23 =</b>		\$
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is <b>\$250</b> for each additional 50 sheets of paper or fraction thereof.		
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)
- 100 =	/50 =	x \$250
		\$
Surcharge of <b>\$130.00</b> for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).		\$ 130.00
CLAIMS	NUMBER FILED	NUMBER EXTRA
Total claims	37 - 20 =	17
Independent claims	3 - 3 =	0
MULTIPLE DEPENDENT CLAIM(S) (if applicable)		+ \$360
<b>TOTAL OF ABOVE CALCULATIONS =</b>		\$ 1210.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.		\$
<b>SUBTOTAL =</b>		\$ 1340.00
Processing fee of <b>\$130.00</b> for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).		+
<b>TOTAL NATIONAL FEE =</b>		\$
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property		+
<b>TOTAL FEES ENCLOSED =</b>		\$ 1340.00
		Amount to be refunded:
		\$
		Amount to be charged:
		\$ 1340.00

 02/17/2006 ATRAM1 00000001 201430 **10536534**

 01 FC:1617 130.00 DA  
 02 FC:1615 850.00 DA  
 03 FC:1616 360.00 DA


 04/12/2006 WALVARAD 00000002 201430 10539534  
 Sale Ref: 00000005 DAH: 201430 10539534  
 01 FC:1617 130.00 DA  
 02 FC:1615 750.00 DA  
 03 FC:1616 360.00 DA

- a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 20-1430 in the amount of \$ 1340.00 to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to  
Deposit Account No. 20-1430. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information  
should not be included on this form.** Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must  
be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Kevin Bastian  
TOWNSEND AND TOWNSEND AND CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, CA 94111-3834

  
SIGNATURE  
Kevin Bastian  
NAME  
34.774  
REGISTRATION NUMBER

60701917 v1



UNITED STATES PATENT AND TRADEMARK OFFICE

082368-004800US

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

U.S. APPLICATION NUMBER NO.

10/539,534

FIRST NAMED APPLICANT

Kazuaki Umeda

ATTY. DOCKET NO.

082368-004800US

INTERNATIONAL APPLICATION NO.

PCT/JP03/16549

I.A. FILING DATE

12/24/2003

PRIORITY DATE

12/24/2002

20350

TOWNSEND AND TOWNSEND AND CREW, LLP  
 TWO EMBARCADERO CENTER  
 EIGHTH FLOOR  
 SAN FRANCISCO, CA 94111-3834

CONFIRMATION NO. 5990

371 FORMALITIES LETTER



\*OC000000017622905\*

**Response Due**2/12/2006

Date Mailed: 12/12/2005

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 06/17/2005
- English Translation of the IA filed on 06/17/2005
- Copy of the International Search Report filed on 06/17/2005
- Copy of IPE Report filed on 06/17/2005
- Preliminary Amendments filed on 06/17/2005
- Biochemical Sequence Diskette filed on 06/17/2005
- Biochemical Sequence Listing filed on 06/17/2005
- U.S. Basic National Fees filed on 06/17/2005
- Priority Documents filed on 06/17/2005

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Additional claim fees of **\$1060** as a non-small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.
- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

**SUMMARY OF FEES DUE:**

Total additional fees required for this application is **\$1190** for a Large Entity:

- **\$130** Surcharge.
- Total additional claim fee(s) for this application is **\$ 1060**
  - **\$700** for **14** total claims over 20.
  - **\$360** for multiple dependent claim surcharge.

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

WINSTON M ALVARADO

Telephone: (703) 308-9140 EXT 206

**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/539,534	PCT/JP03/16549	082368-004800US